Loss of Biodiversity Impacts Human Health

Brussels/Montreal, 4 June 2015 – Healthy communities rely on well-functioning ecosystems. They provide clean air, fresh water, medicines and food security. They also limit disease and stabilize the climate. But biodiversity loss is happening at unprecedented rates, impacting human health worldwide, according to a new state of knowledge review of the Convention on Biological Diversity (CBD) and World Health Organization (WHO).

The report, Connecting Global Priorities: Biodiversity and Human Health, launched today in Brussels at Green Week 2015, Europe's biggest annual conference on environmental policy, focuses on the complex and multi-faceted connections between biodiversity and human health, and how the loss of biodiversity and corresponding ecosystem services may negatively influence health. One of the first integrative reviews of its kind, the report brings together knowledge from several scientific disciplines, including public health, conservation, agriculture, epidemiology and development.

"This state of knowledge review is a significant contribution to our understanding of the complex relationships between biodiversity and health," said Braulio Ferreira de Souza Dias, Executive Secretary of the Convention on Biological Diversity and Assistant Secretary-General of the United Nations. "Increasing our knowledge enables us to develop effective solutions capable of strengthening ecosystem resilience and mitigating the forces that impede their ability to deliver life-supporting services."

All aspects of human well-being depend on ecosystem goods and services, which in turn depend on biodiversity. Biodiversity loss can destabilize ecosystems, promote outbreaks of infectious disease, and undermine development progress, nutrition, security and protection from natural disasters," said Dr Maria Neira, WHO Director, Department of Public Health, Environmental and Social Determinants of Health. "Protecting public health from these risks lies outside of the traditional roles of the Health sector. We are ready to work with other sectors to bring about change."

Access to sufficient quantity, quality and diversity of foods, clean air, freshwater, medicines and healthcare are not only central to maintaining healthy populations, they are foundational pillars of sustainable development. Meeting these needs while facing the persistent challenges of biodiversity loss, ecosystem degradation, emerging disease pandemics and shifting disease burdens is not an insurmountable feat, but it does require concerted action, based on robust evidence and coordinated cross-sector solutions. This comprehensive report brings this knowledge to the forefront, demonstrating that biodiversity loss, ecosystem degradation and ill health often share common threats and pointing toward innovative, mutually-supportive and cross-sectoral solutions.

This contribution is especially timely as governments finalize agreement on the post-2015 development agenda and Sustainable Development Goals and prepare to reach new global commitments to tackle climate change by the end of 2015.

Among the shared threats identified throughout the report, land-use change is identified as an important driver of biodiversity loss with concurrent implications for many of our most pressing public health challenges. For example, land use change through deforestation is a leading driver of disease emergence in humans and is believed to have contributed to the recent Ebola outbreak in West Africa.

While the resulting development of our freshwater and terrestrial resources is also associated with some health benefits, these are unevenly distributed, often to the detriment of our most vulnerable populations and carry unintended consequences. For example, under unsustainable conditions, industrial agricultural practices in many parts of the world may also exacerbate biodiversity loss, pest and disease outbreaks, micronutrient deficiencies, antibiotic resistance and the impacts of climate change on the health. These outcomes are not inevitable. They can be averted through concerted global efforts, by connecting our vast scientific and local knowledge, and developing coherent, cross-sectoral policy priorities toward a healthier, more equitable, sustainable future.

Contributions from over 100 scientists and practitioners working in global public health and biodiversity conservation policy were included in the report, including experts from Bioversity International, COHAB Initiative, DIVERSITAS, EcoHealth Alliance, Harvard School of Public Health, the Oswaldo Cruz Foundation, IUCN, United Nations University, and the Wildlife Conservation Society.

The full report released today is now freely available online at: www.cbd.int/en/health/stateofknowledge and www.who.int/phe

The World Health Organization (WHO)

WHO is the directing and coordinating authority for health within the United Nations system. It is responsible for providing leadership on global health matters, shaping the health research agenda, setting norms and standards, articulating evidence-based policy options, providing technical support to countries and monitoring and assessing health trends. In the 21st century, health is a shared responsibility, involving equitable access to essential care and collective defence against transnational threats. For more information visit: www.who.int/about/en/

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The Convention on Biological Diversity (CBD)

The Convention on Biological Diversity (CBD) opened for signature at the Earth Summit in Rio de Janeiro in 1992 and entered into force in December 1993. The Convention on Biological Diversity is an international treaty for the conservation of biodiversity, the sustainable use of the components of biodiversity and the equitable sharing of the benefits derived from the use of genetic resources. With 196 Parties, the Convention has near universal participation among countries. The Convention seeks to address all threats to biodiversity and ecosystem services, including threats from climate change, through scientific assessments, the development of tools, incentives and processes, the transfer of technologies and good practices and the full and active involvement of relevant stakeholders including indigenous peoples and local communities, youth, NGOs, women and the business community. The Cartagena Protocol on Biosafety and the Nagoya Protocol on Access and Benefit-Sharing are supplementary agreements to the Convention. The Cartagena Protocol, which entered into force on 11 September 2003, seeks to protect biodiversity from the potential risks posed by living modified organisms resulting from modern biotechnology. To date, 169 Parties have ratified the Cartagena Protocol. The Nagoya Protocol aims at

sharing the benefits arising from the utilization of genetic resources in a fair and equitable way, including by facilitating access to genetic resources and by the appropriate transfer of relevant technologies. It entered into force on 12 October 2014 and to date has been ratified by 60 Parties.

For more information visit: www.cbd.int.

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